

READYLIFT[®]

SUSPENSIONS

69-2830 Ford Expedition



READ INSTRUCTIONS THOROUGHLY AND COMPLETELY BEFORE BEGINNING INSTALLATION.

INSTALLATION BY A CERTIFIED PROFESSIONAL MECHANIC IS HIGHLY RECOMMENDED.

READYLIFT[®] IS NOT RESPONSIBLE FOR ANY DAMAGE OR FAILURE RESULTING FROM IMPROPER INSTALLATION.

Safety Warning

MISUSE OF THIS PRODUCT COULD LEAD TO INJURY OR DEATH.

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; damage, injury and/or death can occur if these instructions are not followed.

Installation Warning

All steps and procedures described in these instructions were performed while the vehicle was properly supported on a two post vehicle lift with safety jacks.

Use caution during all disassembly and assembly steps to insure suspension components are not over extended causing damage to any vehicle components and parts included in this kit.

Included instructions are guidelines only for recommended procedures and are not meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications.

ReadyLIFT Suspension recommends the use of an OE Service Manual for model/year of vehicle when disassembly and assembly of factory and related components.

Unless otherwise specified, tighten all bolts and fasteners to standard torque specifications listed within the OE Service Manual.

Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature wear or failure of the bushing and maintain ride comfort.

Larger tire and wheel combinations may increase leverage on suspension, steering, and related components.

Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle ride height. Always measure the vehicle ride height prior to beginning installation.

This suspension system was developed using a 285-75R18 tire with 18" x 9" wheel and a offset of +44. 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 11.5" wide.

The stock spare rim can be run in an emergency - exercise extreme caution under stock spare tire operating conditions. 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.

IMPORTANT NOTE:

This kit was developed using a truck with standard running boards. Power deployable running boards may interfere with the max tire size and require trimming or a smaller tire size in a 33" diameter.

Use of a more negative offset wheel than the factory will require a smaller diameter tire size for clearance.

VEHICLE HEIGHT MEASUREMENTS

	Driver Before	Driver After	Passenger Before	Passenger After
Front				
Rear				

BILL OF MATERIALS

PART/HARDWARE	QTY
Front Strut Extension	2
Rear Strut Extension	2
M10 - 1.25 Flange Nut	12
M10 - 1.5 Flange Nut	6



Before starting 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.

INSTALLATION BY A PROFESSIONAL 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 vehicle alignment is REQUIRED after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- A vehicle lift or hoist greatly reduces installation time. Installation time estimates are based on an available vehicle hoist.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

ReadyLIFT recommends all steps and procedures described in these instructions be performed while the vehicle is properly supported on a two post vehicle lift with safety jacks.

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

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

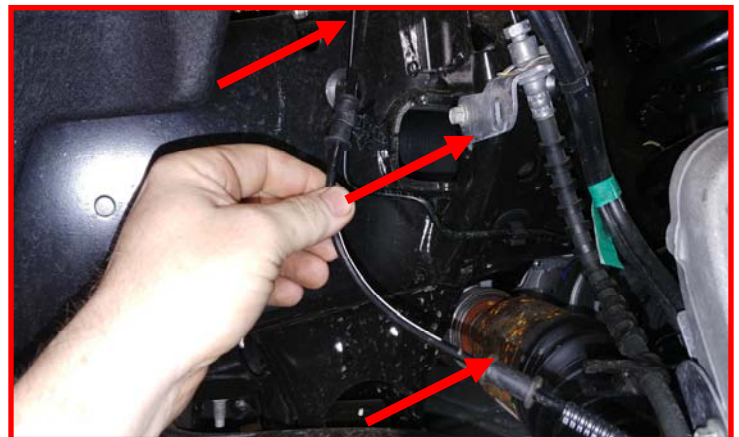
Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

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

Remove the front wheels.



Remove the **ABS harness clips** on the brake line bracket, frame rail and rubber brake line. Let hang out of the way.



Remove the **brake line bracket** at the frame rail.



Remove the **brake line bracket** and **ABS harness** on the knuckle.



Remove the axle nut cover.



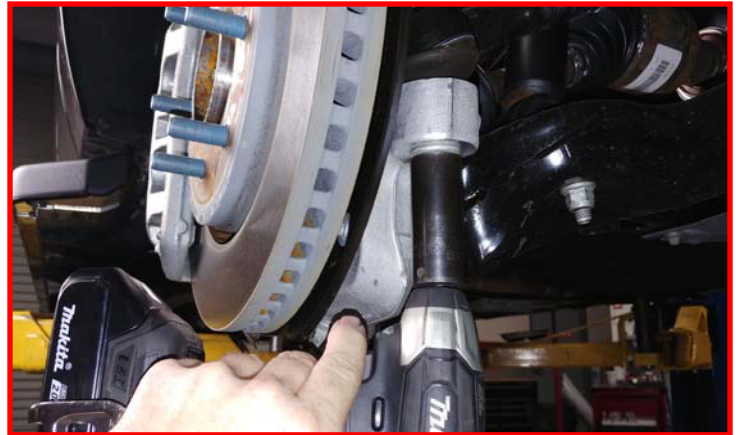
Remove the axle nut.



Locate the vacuum line at the hub actuator and remove.



Remove the tie rod end at the knuckle. Use a dead blow hammer, strike the tie rod end boss to dislodge the taper.



Remove upper ball joint from the knuckle. Strike the ball joint boss with a dead blow hammer to dislodge the taper.



Loosen but do not remove the upper control arm hardware. Raise the upper control arm up and tilt the knuckle away from the frame. Carefully disengage the CV axle from the hub and actuator. Be careful not to damage the Vacuum actuator. The internals are made of plastic and easily damaged.



Support the lower control arm with a suitable jack. Loosen but do not remove the lower control arm to frame mounting hardware. Remove the **lower strut** from the lower control arm. Remove the **sway bar end link** from the lower control arm.



Carefully lower the control arm and knuckle assembly down until the strut clears the control arm. Make sure to not over extend the brake lines and ABS harness. Adjust as necessary. To aid in removal, push knuckle towards the frame as you lower the control arm. Remove the strut from the vehicle by undoing the upper strut hardware.



Install the ReadyLIFT front strut spacer using the **factory hardware**. Torque to **30 ft-lbs**.



Install the completed strut assembly to the frame using the provided **M10 -1.25 Flange nuts**. Do not tighten at this time.



Raise the lower control arm up while guiding the **lower strut** into place. Install using the **factory hardware**. Install the **sway bar end link** using the **factory hardware**. Torque all to **45 ft-lbs**.



Carefully guide the CV axle back into the hub assembly. Rotate the hub by the lugs while holding the CV axle from rotating, continue rotating the hub until the CV axle splines and vacuum hub splines lock. You will be able to tell if these are meshed properly if both the hub and CV axle spin together as the hub is rotated. If the CV axle is not rotating with the hub, continue to rotate the hub until full engagement occurs. If this is not done properly, you may damage the vacuum assembly as the internals are made of plastic and easily broken. Once you are sure of the full engagement of the spines, install the factory CV hardware. Torque to **18 ft-lbs**.

Install the upper ball joint to the knuckle using the **factory hardware**. To get to seat properly, you will need to raise the lower control arm upwards with a suitable jack to "load" the suspension. Once the suspension is loaded, torque the upper ball joint to **65 ft-lbs**.



Install the tie rod end to the knuckle using the **factory hardware**. Torque to **45 ft-lbs**.



Install the vacuum line to the vacuum actuator by pressing into place.



Install the brake line bracket and ABS harness to the knuckle using the **factory hardware**. Torque all to **5 ft-lbs**.



Install the **brake line bracket** to the frame rail using the **factory hardware**. Torque to **5 ft-lbs**. Install the ABS harness to the frame rail, brake line bracket, and rubber brake line using the factory clips.



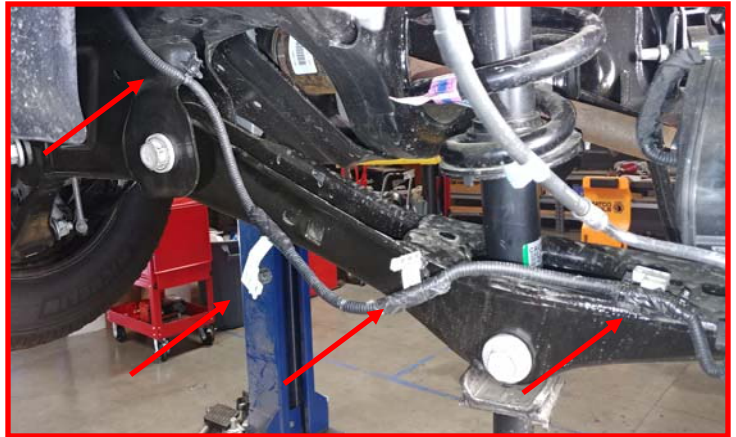
Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturers specs. Jounce the vehicle to settle the suspension to the new ride height.

Torque the upper control arm hardware to **125 ft-lbs**. Center the lower control arm bolts in their slots and torque to **125 ft-lbs** (final torque to be done by the alignment technician).

Block the front wheels for safety, raise the rear of the vehicle and place jack stands under the frame rail in front of the lower control arms. Remove the rear wheels.



Locate the ABS wire harness on the rear lower control arm. Remove the plastic clips from the control arm and frame rail. Let the ABS harness hang out of the way. Place a suitable jack under the lower strut mount.



Loosen but do not remove all the trailing arm hardware at the frame and knuckle.

Loosen but do not remove upper control arm hardware at the frame.

Loosen but do not remove the tie rod end hardware at the frame.

Remove the lower strut hardware. Remove the lower control arm hardware at the frame. Lower the control arm from the frame. Remove the strut from the frame and vehicle.



Locate the ReadyLIFT strut spacer. Install using the provided **M10 - 1.5 flange nuts**. Torque to **30 ft-lbs**. Install the completed strut assembly into the frame using the provided **M10 - 1.25 flange nuts**. Do not tighten at this time.



Raise the lower control up to the strut. Install the strut hardware. Do not tighten at this time. Raise the lower control arm up to the frame and install the control arm hardware. Do not tighten at this time. Install the ABS harness clips to the lower control arm.



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

Jounce the vehicle to get the suspension to settle to the new ride height. Torque the upper/rear lower control arm and trailing arms hardware to **125 ft-lbs**, the tie rod arm at the frame to **100 ft-lbs** (final torque to be done by alignment technician), the upper strut mount to **30 ft-lbs**, and the lower strut mount to **145 ft-lbs**.

Reconnect the battery ground terminal. Start the vehicle and turn the steering wheel lock to lock and verify all clearances between tire, body and suspension components. Adjust as necessary.

Have the vehicle alignment set to the recommended specs on the last page of this instruction booklet.



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.

Final Checks & Adjustments

Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to ensure proper torque. Torque lug nuts to the wheel manufacturer 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, adjust as necessary.

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

Vehicle Handling Warning

Increasing the height of your vehicle raises the center of gravity and can affect stability and control. Use caution on turns and when making steering corrections.

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. If the vehicle is equipped with active or passive safety/collision monitoring and/or avoidance systems including, but not limited to, camera- or radar-based systems, check and adjust your vehicle's systems for proper aim and function.

RECOMMENDED ALIGNMENT SPECS

Front	Driver	Passenger	Tolerance	Total / Split
Camber	-0.3	-0.3	+/- 0.5	+0.0
Caster	+3.0	+3.0	+/- 0.5	+0.0
Toe	+.07	+.07	+/-0.05	+.14
Rear	Driver	Passenger	Tolerance	Total / Split
Camber	-0.5	-0.5	+/- 0.5	+0.0
Toe	+.05	+.05	+/-0.05	+.10