

## 66-2930 Ford Ranger Leveling Kit

IF your ReadyLIFT® product has a damaged or missing part, please contact customer service directly and a new replacement part will be sent to you immediately. For warranty issues, please return to the place of installation and contact ReadyLIFT.

(877) 759-9991

MON-FRI 7AM-4PM PST OR

EMAIL: support@readylift-ami.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 90 day return policy on uninstalled products from the date of purchase (may be subject to restocking fee). Uninstalled product returns must be in the original Ready-LIFT packaging. Please call **(877) 759-9991** 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.

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.



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 285-60R18 tire with  $18 \times 9''$  wheel offset of +18 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:**

Use caution when removing the knuckle from the upper ball joint. Without supporting the lower control arm the knuckle can tip and damage the CV axles, brake lines, and ABS wires.

Use caution when lowering the LCA to remove the strut. Hold onto the strut, it may fall or tip and damage the CV axles, brake lines, and/or ABS wires.

It is a good idea to have assistance in these during these operations.

Minor modifications may have to be done to the front to clear 33" tires.

#### VEHICLE HEIGHT MEASURMENTS

	Driver Before	Driver After	Passenger Before	Passenger After
Front				
Rear				

#### **BILL OF MATERIALS**

Part #	Description	QTY
68-2930FSTH	Front strut replacement top hat	2
	M10-1.50 flange nuts	6
84-1378	M12-1.75 top lock nuts Rubber top hat bushings	2 4
68-2930LCW	Top hat containment washers	4
68-2930CS	Bushing crush sleeve	2

# **▲**WARNING

Before starting installation: ReadyLIFT Suspension recommends that the installation of this product be preformed 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.

#### **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 four wheel vehicle alignment will needed to be preformed after installation of this product.
- Speedometer / computer calibration is required if changing +/- 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.

## \*\*\*Parts shown in red for picture clarification only\*\*\*

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 and tires.

Use a suitable jack to support the lower control arm.

Loosen, but don't remove upper control arm (UCA) hardware at the frame.

Remove the three upper strut mounting nuts.



Remove ABS wire from the steering knuckle.

Remove the brake line from the steering knuckle.

Loosen but DO NOT remove the upper ball joint nut

Remove tierod from the steering knuckle.





Loosen driver and passenger side sway bar from the frame rails.

Remove the driver side sway bar from the steering knuckle.





Remove the brake caliper, be sure to secure the caliper with a hanger. Don't let the caliper hang from brake line.

Remove the brake rotor.

Remove the constant velocity (CV) axle nut.





use a hammer to dislodge the axle from the wheel bearing. Use cation with this, don't strike the axle with the hammer. use a center punch and align with the center hole on the axle.

Remove the lower strut mounting hardware.





With the upper ball joint nut loose and the tie rod nut removed, strike the ball joint boss with a dead blow hammer to dislodge the taper. Once the taper is dislodged remove the upper ball joint hardware, and separate the UCA and the tie rod from the steering knuckle. Allow the steering knuckle to lean out, for clearance. Take care to not over extend or stretch the CV axle Adjust as necessary.





Loosen but do not remove the lower control arm (LCA) hardware at the frame. Lower the LCA while supporting the knuckle and remove the strut from the vehicle. Take care to not over extend or stretch the ABS-rubber brake lines and CV axle. Adjust as necessary.





Place the strut in a spring compressor. Use a paint pen to make alignment marks, one on strut top hat, rubber isolator, and on the spiring. Second alignment marks on the strut, spring perch, and on the bottom of the spring.





Compress the spring and shock, until the tension is released from the tension nut.

Remove the tension nut from the strut assembly. Release the spring compressor, and remove the factory top hat.







Add the rubber bushing top and bottom and the crush sleeve supplied to the ReadyLift replacement top hat.





Remove the rubber isolator from the factory top hat. Install the rubber isolator onto the ReadyLift replacement top hat, align the paint mark with one of the studs.

Add one of the containment washers to the shock. Add the ReadyLift top hat assembly to the factory spring, and recompress, add the shock, realign all the paint marks. Add the second containment washer, and the supplied top lock nut. Tighten the C lock nut, the washers nut will bottom out on the crush sleeve. There should be one thread showing on the shock.

Reinstall the strut into the truck. 1st align the top hat to the strut tower, use three of the supplied flange nuts, hand tighten at this point only.

Using a jack raise the LCA and reinstall the bottom studs of the strut to the LCA hand tighten only.

Realign the CV axle, make sure the splines between the axle and wheel bearing are aligned.

push the steering knuckle into position and reattach the UCA and hand tighten the original nut original nut.















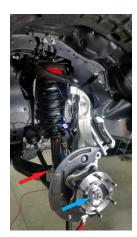
Reattach the tie rod to the steering knuckle, and tighten 45ft-lbs of torque.

Reinstall the CV axle nut and tighten 150ft-lbs of torque.

Reinstall brake rotor, and caliper tighten 85ft-lbs of torque.



Tighten the upper ball joint 65ft-lbs of torque









Repeat the same process on the opposite side of the vehicle.

Reinstall the wheels, lower the vehicle to the ground.

Once both sides are complete, reattach the sway bar to the frame rails using factory hardware. Torque to 45ft-lbs

Torque the lug nuts to the wheel manufacture specs.

Jounce the vehicle to get the suspension to settle to new ride height.

Center the LCA cam bolts, torque to 100 ft-lbs initial (final torque to be done by alignment Tech.

Torque the UCA to 80ft-lbs, upper strut mount to 30 ft-lbs, lower strut mount to 85 ft-lbs.

Reattach the vehicles power source at the ground terminal.

Have the vehicle alignment set by a reputable shop to the recommended alignment specs provided 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**

	Driver	Passenger	Tolerance	Total / Split
Camber	+0.0	+0.0	+/- 0.5	+0.0
Caster	+2.5	+2.5	+/- 0.5	+0.0
Toe	+.10	+.10	+/-0.05	+.20