

## Raptor 66-2715, 66-2755

**IF your ReadyLIFT® product has a damaged or missing 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**

**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 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.

## Raptor 66-2715, 66-2755

Please read Instructions thoroughly and completely before beginning installation.  
Installation by a certified professional mechanic is highly 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" x 12.5" 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. **This kit is designed primarily for low speed 4WD usage and the vehicle should be kept in 2WD mode on the street. Speedometer calibration is necessary.**

### VEHICLE HEIGHT MEASUREMENTS

Measure from the center of the wheel to the fender line straight above for references.

	Driver Before	Driver After	Pass. Before	Pass. After
Front				
Rear				

## Raptor 66-2715, 66-2755

### BILL OF MATERIALS

<b>TOP STRUT EXTENSION (1.5" LIFT)</b>	<b>2</b>
<b>PRE-LOAD SPACER (2.5" LIFT)</b>	<b>2</b>
<b>M10 FLANGE NUTS</b>	<b>6</b>

**\*\*\*Parts shown in red are for picture clarification only, actual lift components, and colors may vary.\*\*\***

### 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: **This kit is designed primarily for low speed 4WD usage and the vehicle should be kept in 2WD mode on the street.**

- 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.
- Vehicles with a two piece rear driveline may require a carrier bearing drop support bracket, call technical assistance for details.
- 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.

## **Raptor 66-2715, 66-2755**

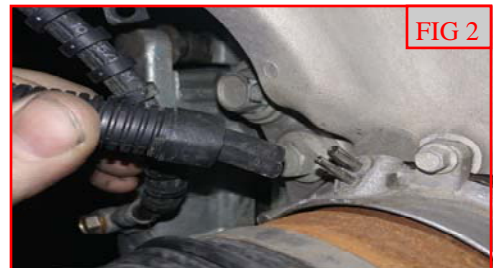
**\*\*\*Parts shown in red are for picture clarification only, actual lift components, and colors may vary.\*\*\***

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. Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms. Remove the front wheels. Place a suitable jack under the lower control arm for support.

Remove the ABS wire from the frame rail, brake line bracket, rubber brake lines clamps, and knuckle. Remove the brake line bracket from the knuckle. FIG 1



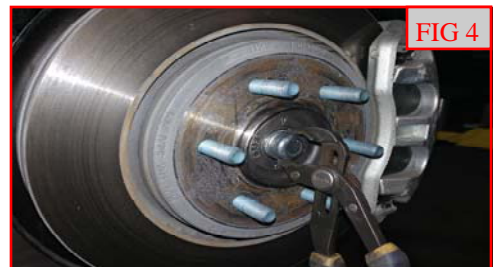
Remove the vacuum hose from the vacuum actuator on the knuckle. FIG 2



Remove the sway bar end link at the sway bar. FIG 3



Remove the axle nut dust cap. FIG 4



Remove the axle nut. FIG 5



## Raptor 66-2715, 66-2755

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. FIG 6



Remove the brake caliper hardware. FIG 7



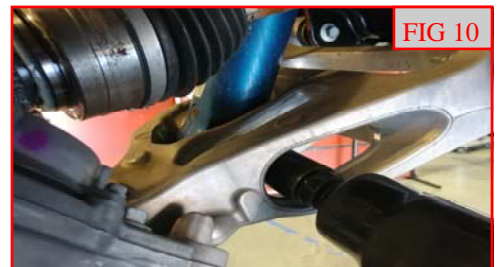
Use a suitable device and hang the caliper out of the way. Do not let the caliper hang by the brake line. Remove the brake rotor and set aside. FIG 8



Remove the upper ball joint hardware from the knuckle. Strike the ball joint boss on the knuckle with a dead blow hammer to dislodge the taper. Loosen but do not remove the upper and lower control arms at the frame. FIG 9



Remove the lower strut mount hardware at the lower control arm. Supporting the knuckle, lower the control arm until the lower strut mount can clear. The axle will come out of the hub assembly. Make sure to not over extend the ABS line and that the axle does not damage the vacuum assembly. FIG 10



Remove the upper strut mount at the frame and remove the strut from the vehicle. Mark the top hat and lower spring perch in relation to the strut body. This is very important to keep the spring to upper control arm clearances for full droop. FIG 11, 12



## Raptor 66-2715, 66-2755

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

**2.5" kit Pre-load spacer:** Using a suitable spring compressor, release the tension on the factory top hat. FIG 12



**2.5" kit Pre-load spacer:** Remove the factory top hat. Pull the rubber isolator and dust shield out and replace onto spring. FIG 13



**2.5" kit Pre-load spacer:** Install the ReadyLIFT pre-load spacer into the top hat. FIG 14



**2.5" kit Pre-load spacer:** Install the factory top hat onto the strut assembly **180 degrees** from the factory orientation using the previous marks made as a guide. This is very important for spring to control arm clearances once the strut assembly is installed back into the vehicle. FIG 15



**1.5" kit top extension only:** If you are only installing the top extension kit, Put the strut assembly into a suitable spring compressor and release the tension. Rotate the factory top hat **180 degrees** from the factory orientation using the previous marks made as a guide. Remove the strut from the compressor. FIG 16



**1.5" and 2.5" kit top extension:** Install the factory nuts onto the strut hat studs running them down until they bottom out. Using a suitable cutting tool, cut the studs off just above the nut. Remove the nuts and clean any off any burrs. Paint the exposed metal with a quality rust preventative paint. FIG 17



## Raptor 66-2715, 66-2755

**1.5" and 2.5" kit top extension:** Install the ReadyLIFT strut extension using provided **10mm flange nuts**. Torque to **15 ft-lbs**. FIG 18



Install the completed strut into the side of the vehicle they came out of using the **factory hardware**. Do not tighten at this time. FIG 19



Raise the lower control arm up while guiding the axle and lower strut into place. Install the lower strut mount **factory hardware**. Do not tighten at this time. FIG 20



Raise the upper control arm up. Mark the frame in the center between the pocket walls 3/4" down from the edge. FIG 21



Drill out the mark with a 1/2" drill bit. Install the ReadyLIFT capture nut onto the frame. FIG 22



Install the ReadyLIFT® provided **urethane bump stop** by screwing into the capture nut until fully seated. FIG 23



## Raptor 66-2715, 66-2755

Install the axle into the vacuum actuator assembly making sure to not damage the internal components. As you guide the axle into the hub, slowly rotate the hub flange until the internal gears mesh. You will be able to tell if they mesh once the axle shaft extends all the way through the hub. The shoulder of the axle will appear just below the hub surface by a few millimeters. If this is not done correctly, you risk breaking the internal components. Once the gears mesh, you will be able to install the **factory axle nut**. Torque to **18 ft-lbs**. Install the axle nut dust cap. FIG 24



FIG 24

Jack the lower control arm up to add pressure to the strut. Putting a suitable jack stand at the rear of the vehicles frame will aid in keeping the load transfer from picking the front end up while jacking the lower control arm up. FIG 25



FIG 25

Lower the upper control arm while lining the upper ball joint into place. Install the upper ball joint to the knuckle using **factory hardware**. Torque to **85 ft-lbs**. FIG 26



FIG 26

Install rotor and brake caliper assembly to hub assembly and knuckle using **factory hardware**. Apply a drop of thread locker to threads and torque to **148 ft-lbs**. FIG 27



FIG 27

Install the outer tie rod end to the knuckle using **factory hardware**. Torque to **85 ft-lbs**. FIG 28



FIG 28

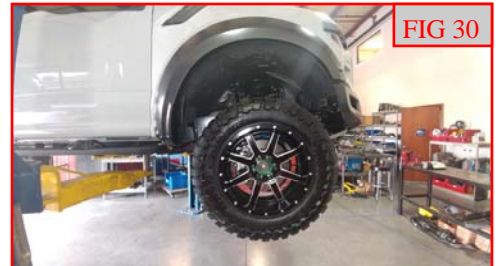


## Raptor 66-2715, 66-2755

Install the brake line bracket to the knuckle using **factory hardware**. Torque to **5 ft-lbs**. Install the ABS line back to the frame, to the rubber brake line clamps, and knuckle using **factory hardware**. Torque to **165 in-lbs**. Install the vacuum lines to the vacuum actuator. FIG 29



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



Jounce the vehicle a few times to get it to settle to the new ride height, with this type of vehicle you may need to pull it out of the shop and hit the brakes a few times and rotate the wheel from lock to lock. Torque the upper control arms to **120 ft-lbs**, the lower control arm bolts to an initial **120 ft-lbs** (final torque to be done by alignment technician at **150 ft-lbs**), lower strut mount to **230 ft-lbs**, upper strut mount to **15 ft-lbs**, and sway bar end link to **45 ft-lbs**.

Have the alignment set to the recommended specs on the last page of this instruction booklet by a qualified alignment shop.

## Raptor 66-2715, 66-2755

**\*\*\*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:

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.

### RECOMMENDED ALIGNMENT SPECS

	Driver	Passenger	Tolerance	Total / Split
Camber	-0.3	-0.3	+/- 0.5	+0.0
Caster	+3.5	+3.8	+/- 0.5	+0.0
Toe	+0.10	+0.10	+/-0.05	+0.20